

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Blau *et al.*

Serial No.: 10/727,088

Filed: December 2, 2003

For: MAN-RATED FIRE SUPPRESSION
SYSTEM

Confirmation No.: 6016

Examiner: D. Hwu

Group Art Unit: 3752

Attorney Docket No.: 2507-6010US
(22031-US-03)

VIA ELECTRONIC FILING
August 15, 2008

PRE-APPEAL BRIEF

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Pre-Appeal Brief is filed in response to the Examiner's remarks in the Final Office Action ("Final Office Action") mailed June 16, 2008. This Pre-Appeal Brief is submitted in accordance with the requirements of the Pre-Appeal Brief Conference Pilot Program (*see* 1296 Off. Gaz. Pat. Office 67, July 12, 2005) and is submitted concurrently with a Notice of Appeal and Pre-Appeal Brief Request for Review.

REMARKS

Claims 1-5, 7-16, 18-67, 69-90, and 94-119 are currently pending in the application, of which claims 1-5, 7-16, 18-28, 31-65, 69-82, and 115-119 are currently under examination and stand rejected. Claims 29, 30, 66, 67, 83-90, and 94-114 are withdrawn from consideration. However, as detailed on p. 14-15 of the 8/14/2006 Response, p. 15 of the 9/25/06 Response, p. 17 of the 1/11/2007 Response, p. 18-19 of the 5/29/07 Response, and p. 18-19 of the 10/31/07 Response, the Election of Species Requirement regarding these claims should be withdrawn, such that claims 1-5, 7-16, 18-67, 69-90, and 94-114 are under examination. Despite repeated requests, the Examiner has not responded to Applicants' arguments requesting examination of the withdrawn claims. Applicants submit that there are clear errors in the rejection of the pending claims and that the Examiner has omitted one or more essential elements needed for a *prima facie* rejection. The pending claims are directed, generally, to fire suppression systems and a method of fighting a fire in a space.

The teachings of Galbraith are summarized on p. 21 of the 3/13/08 Response. The teachings of Taylor and Moore, Hinshaw, and Knowlton are summarized on p. 21, 23, and 24, respectively, of the 1/11/07 Response. The teachings of Drakin are summarized on p. 20 of the 10/31/07 Response. Canterbury teaches a gas generating composition that includes a non-azide fuel, ammonium nitrate, and silicon. Canterbury at the Abstract. The gas generating composition is potentially used in a fire suppression device. *Id.* at column 4, lines 44-45. Canterbury is silent regarding details of such a fire suppression device and its operation.

Claims 1-5, 7-14, 18, 22-25, 57-65, 69, 72-75, 77, 78, and 115-119 stand rejected as allegedly being obvious over Galbraith in view of Canterbury, as detailed on p. 2-3 of the outstanding Office Action. Galbraith and Canterbury do not teach or suggest all the limitations of independent claim 1 because nothing in Galbraith or Canterbury teaches or suggests the limitation of "the fire suppression system configured to dispel, at an exit thereof, the inert gas mixture to provide a dispelled inert gas mixture into a space, the dispelled inert gas mixture comprising carbon dioxide in a concentration substantially equal to the concentration pyrotechnically produced by the at least one gas generant." The Examiner has not identified any portion of Galbraith or Canterbury that teaches or suggests this limitation. Instead, the Examiner

appears to have overlooked all of the language in this limitation, in direct contradiction to M.P.E.P. § 2143.03 which states that “[a]ll words in a claim must be considered in judging the patentability of that claim.” Galbraith does not teach or suggest this limitation for the reasons described on p. 22 of the 3/13/08 Response (addressing the alleged anticipation of claim 1 by Galbraith). Since the Examiner did not provide a rebuttal to this argument, Applicants are unclear which portion of Galbraith the Examiner considers to teach the above-mentioned limitation and are unable to prepare arguments addressed thereto. Canterbury does not cure the deficiencies in Galbraith because Canterbury is silent about details of a fire suppression device and its operation. As such, Canterbury also does not teach or suggest the above-mentioned limitation.

In addition, there is no reason in the prior art, common knowledge, or the nature of the problem itself that would have prompted the combination of Galbraith and Canterbury in the manner asserted by the Examiner on p. 2-3 of the outstanding Office Action. Moreover, even if Galbraith were modified to include the non-azide composition of Canterbury, the claimed invention would not be produced because the resulting apparatus would not be configured to dispel, at an exit thereof, the inert gas mixture to provide a dispelled inert gas mixture, as recited in claim 1, into a space.

Independent claim 57 recites “dispersing the inert gas mixture into a space to extinguish a fire, the dispersed inert gas mixture comprising carbon dioxide in a concentration substantially equal to the concentration produced by ignition of the at least one gas generant such that the space comprises carbon dioxide at a concentration less than or equal to the Immediately Harmful to Life or Health concentration of carbon dioxide.” The Examiner has not identified anything in Galbraith or Canterbury that teaches or suggests this limitation. Galbraith does not teach this limitation for the reasons described on p. 23 of the 3/13/08 Response. Canterbury does not cure the deficiencies in Galbraith for similar reasons as described above for claim 1. In addition, there is no reason in the prior art, common knowledge, or the nature of the problem itself that would have prompted the combination of Galbraith and Canterbury in the manner asserted by the Examiner for similar reasons as described above for claim 1.

Since independent claims 107 and 116-118 recite limitations similar to that of claim 1, these claims are allowable for similar reasons as described above for claim 1. Claim 107 recites

“the fire suppression system configured to dispense, at an exit thereof, the inert gas mixture comprising carbon dioxide in a concentration substantially equal to the concentration pyrotechnically produced by the at least one gas generant,” claim 116 recites “the fire suppression system configured to dispel, at an exit thereof, the first gas mixture and a second gas mixture comprising carbon dioxide into a space to provide carbon dioxide at a concentration less than or equal to the Immediately Harmful to Life or Health concentration of carbon dioxide in the space,” claim 117 recites “the fire suppression system configured to dispel, at an exit thereof, at least a portion of the inert gas mixture, the dispelled inert gas mixture comprising carbon dioxide in a concentration equal to the concentration pyrotechnically produced by the at least one non-azide or non-azole gas generant,” and claim 118 recites “the fire suppression system configured to dispel, at an exit thereof, the inert gas mixture as pyrotechnically produced into a space, the space comprising carbon dioxide at less than approximately 4% by volume.” Galbraith or Canterbury does not teach or suggest these limitations and there is no reason in the prior art, common knowledge, or the nature of the problem itself that would have prompted the combination of Galbraith and Canterbury in the manner asserted by the Examiner for similar reasons as described above for claim 1.

Dependent claims 2-5, 7-14, 18, 22-25, 58-65, 69, 72-75, 77, 78, 108-115, and 119 are allowable, *inter alia*, as depending from allowable base claims. Claims 7 and 23-25 are further allowable for the additional reasons stated on p. 22-23 of the 3/13/08 Response because Canterbury does not cure the deficiencies of Galbraith identified therein.

Dependent claims 15, 16, 19-21, 26-28, 31-45, 46, 47, 48, 49, 50-52, 53-56, 70, 71, 76, 79, 80, 81, and 82 stand rejected as allegedly being unpatentable over Galbraith and Canterbury in view of various combinations of Taylor, Moore, Hinshaw, Knowlton, or Drakin, as detailed on p. 3-6 of the outstanding Office Action. These dependent claims are allowable, *inter alia*, as depending from allowable base claims. Since none of Canterbury, Taylor, or Moore cures the deficiencies in Galbraith, claims 79 and 80 are allowable for the additional reasons stated on p. 27 of the 3/13/08 Response. Since neither Canterbury nor Knowlton cures the deficiencies in Galbraith, claims 19-21 and 76 are allowable for the additional reasons stated on p. 29 of the 3/13/08 Response. Since neither Canterbury nor Drakin cures the deficiencies in Galbraith, claim 37 is allowable for the additional reasons stated on p. 30 of the 3/13/08 Response. Since

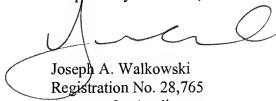
none of Canterbury, Taylor, Moore, or Drakin cures the deficiencies in Galbraith, claim 46 is allowable for the additional reasons stated on p. 30 of the 3/13/08 Response. Since none of Canterbury, Taylor, Hinshaw, or Drakin cures the deficiencies in Galbraith, claim 47 is allowable for the additional reasons stated on p. 31-32 of the 3/13/08 Response. Since none of Canterbury, Knowlton, or Drakin cures the deficiencies in Galbraith, claims 50-52 and 76 are allowable for the additional reasons stated on p. 33 of the 3/13/08 Response.

In summary, by disregarding the language actually recited in the claims and by not presenting rejections that address all the claim language, the Examiner has not established a *prima facie* rejection of the pending claims. As such, Applicants have been unable to prepare appropriate and detailed arguments regarding the patentability of the pending claims.

CONCLUSION

Applicants submit that the Examiner's rejections are clearly erroneous and that the Examiner has not satisfied his burden of setting forth a *prima facie* rejection of the rejected claims. Applicants respectfully request reversal of the rejection of claims 1-5, 7-16, 18-28, 31-65, 69-82, and 115-119 on the above-identified grounds, and withdrawal of the Election of Species Requirement of claims 29, 30, 66, 67, 83-90, and 94-114 on the above-identified grounds.

Respectfully submitted,



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